

# KB2400 2V 400Ah



The Kaise Ultra Long Life series of VRLA batteries is known for having the most reliable and highest quality of the entire industry. Built with AGM technology, these batteries reach a service life of 20 years.



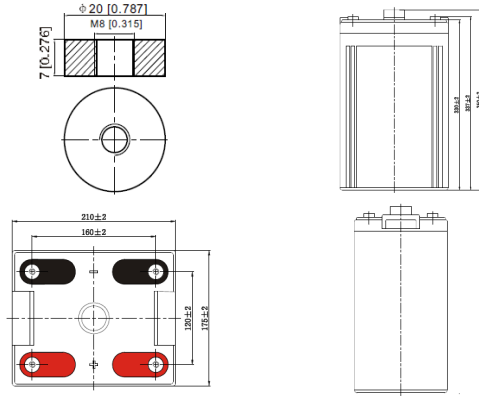
## Performance Characteristics

Nominal Voltage	2V	
Dimensions	Length (mm / inch)	210 / 8.27
	Width (mm / inch)	175 / 6.89
	Height (mm / inch)	330 / 12.99
	Total Height (mm / inch)	350 / 13.78
Approx. Weight	(Kg / lbs) 26.4 / 58.2	
Design Life	20 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	426.0Ah / 21.3 A	(20hr, 1.80V/cell, 25°C / 77°F)
	400.0Ah / 40.0 A	(10hr, 1.80V/cell, 25°C / 77°F)
	355.0Ah / 71.0 A	(5hr, 1.75V/cell, 25°C / 77°F)
	307.7Ah / 102.9 A	(3hr, 1.75V/cell, 25°C / 77°F)
	240.3Ah / 240.3 A	(1hr, 1.60V/cell, 25°C / 77°F)
Max. Discharge Current	3200A (5s)	
Internal Resistance	Approx 0.7mΩ	
Operating Temp. Range	Discharge : -20 ~ 50°C (-4 ~ 122°F)	
	Charge : 0 ~ 40°C (32 ~ 104°F)	
	Storage : -20 ~ 50°C (-4 ~ 122°F)	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 80.0A	
	Voltage: 2.40VPC ~ 2.45VPC at 25°C (77°F)	
	Temp. Coefficient: -5mV/°C	
Standby Use	Initial Charging Current less than 80.0A	
	Voltage: 2.20VPC ~ 2.30VPC at 25°C (77°F)	
	Temp. Coefficient: -3mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Fully charged Kaise Ultra Long Life Series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

## Constant Current Discharge (Amperes) at 77°F (25°C)

Volts/cell	20min	30min	45min	1h	5h	10h	20h
1.80V	403.6	322.0	253.2	209.8	68.9	40.0	21.3
1.75V	435.1	341.0	266.2	218.9	71.0	40.5	21.4
1.70V	465.5	357.8	276.2	226.6	72.2	41.0	21.7
1.65V	488.4	375.4	288.3	234.7	73.8	41.5	21.9
1.60V	506.4	388.2	296.0	240.3	74.8	42.1	22.1

## Dimensions and Terminal (Unit: mm (inches))



## Applications

- Renewable Energy
- Alarm systems
- Electric Test Equipment
- Emergency lighting systems
- Marine equipment
- Telecommunications systems

## Certifications

ISO 9001:2008 ISO 14001:2008



## Discharge Current vs. Discharge Voltage

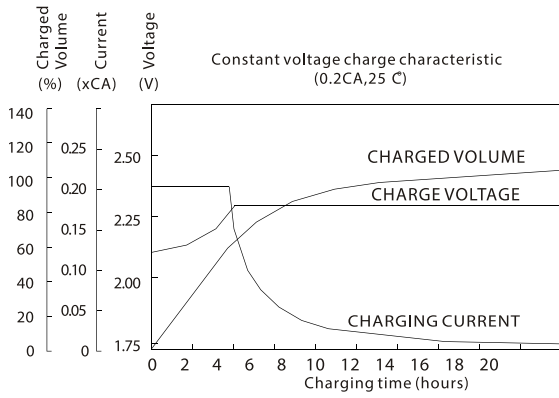
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	I ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

## Constant Power Discharge (Watts per cell) at 77°F (25°C)

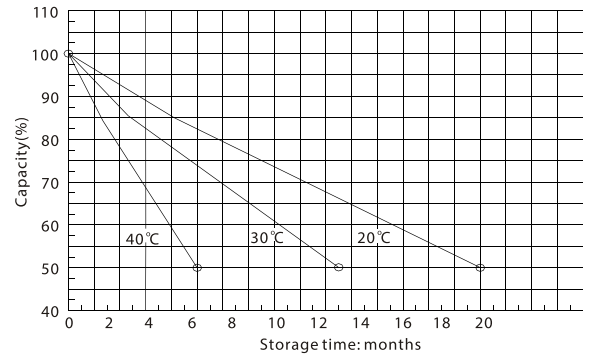
Volts/cell	15min	30min	45min	1h	5h	10h	20h
1.80V	759.6	610.5	483.6	403.6	135.1	79.4	42.4
1.75V	809.5	641.6	505.5	419.2	138.8	80.4	42.6
1.70V	858.7	667.5	520.9	431.6	140.7	81.3	43.0
1.65V	891.2	695.0	540.5	444.6	143.3	82.1	43.4
1.60V	913.5	711.6	549.8	451.9	144.7	83.1	43.7

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

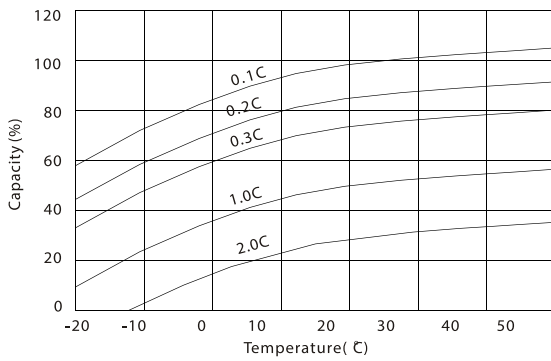
## Charging Characteristic (cycle use)



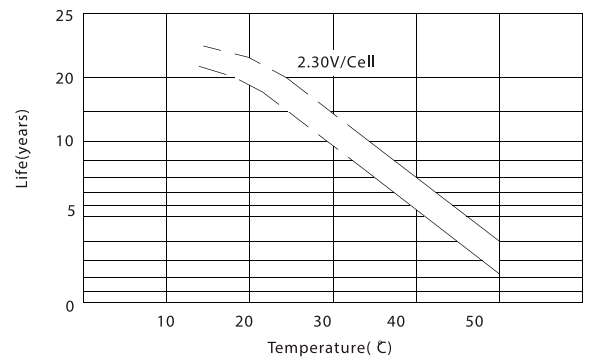
## Self Discharge Characteristics



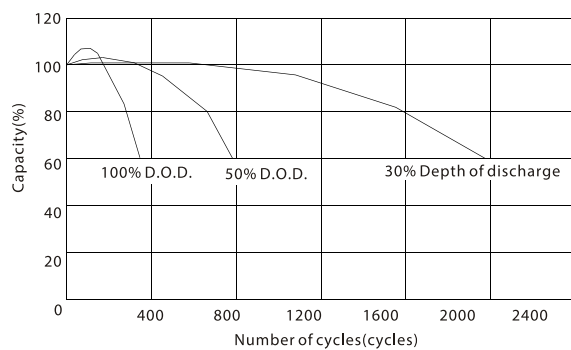
## Temperature Effects in Relation to Battery Capacity



## Temperature Effects on Float Life



## Cycle Service Life in Relation to Depth of Discharge



IMPORTANT NOTE: The specifications presented herein are subject to revision without notice.

